

IN THE CLAIMS:

1. (Original) An optical disc recording method, comprising:  
  
repeatedly performing a test record a plurality of times, prior to an actual record on an optical disc, in an outer peripheral test area of the optical disc which is on an outer peripheral side with respect to a program area of the optical disc, wherein the test record includes:  
  
controlling a velocity to a predetermined linear velocity, and  
  
sequentially changing a recording power;  
  
obtaining an appropriate recording power value at the linear velocity, on the basis of reproduced signals of the plural test records in the outer peripheral test area; and  
  
performing an actual record on the optical disc while controlling the recording power to the appropriate recording power value at the predetermined linear velocity, or to an appropriate recording power value which is obtained on the basis of the appropriate recording power value at another linear velocity.
2. (Original) The optical disc recording method of claim 1, further comprising:  
  
on the basis of reproduced signals of the plural test records in the outer peripheral test area, obtaining a recording power value for each of the test records, wherein a predetermined parameter relating to a reproduced signal quality has an appropriate value at the recording power value; and  
  
on the basis of recording power values which are obtained respectively for the test records, obtaining the appropriate recording power value at the predetermined linear velocity.
3. (Original) The optical disc recording method of claim 2, further comprising:  
  
eliminating an outlier value in the recording power values respectively obtained for the plural test records in the outer peripheral test area;  
  
obtaining an average value of remaining recording power values; and

obtaining the average value as the appropriate recording power value at the predetermined linear velocity.

4. (Original) The optical disc recording method of claim 2, further comprising:

obtaining a minimum value of the recording power values respectively obtained for the plural test records in the outer peripheral test area; and

obtaining the minimum value as the appropriate recording power value at the predetermined linear velocity.

5. (Original) The optical disc recording method of claim 1, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a circumferential direction of the optical disc.

6. (Original) The optical disc recording method of claim 2, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a circumferential direction of the optical disc.

7. (Original) The optical disc recording method of claim 3, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a circumferential direction of the optical disc.

8. (Original) The optical disc recording method of claim 4, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a circumferential direction of the optical disc.

9. (Original) The optical disc recording method of claim 1, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

10. (Original) The optical disc recording method of claim 2, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

11. (Original) The optical disc recording method of claim 3, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

12. (Original) The optical disc recording method of claim 4, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

13. (Original) The optical disc recording method of claim 5, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

14. (Previously Presented) An optical disc recording method in which an actual record is performed on an optical disc while, in an inner peripheral side of the optical disc with respect to an adequate radial position, a velocity is controlled by making a rotational velocity constant, and, in an outer peripheral side of the optical disc, the velocity is controlled by making a linear velocity constant at a final value of a linear velocity in the constant rotational velocity control, said method comprising:

performing a test record one time, prior to the actual record on the optical disc, in an inner

peripheral test area of the optical disc which is on an inner peripheral side with respect to a program area of the optical disc, while controlling a velocity by making a linear velocity constant at an initial value of the linear velocity in the constant rotational velocity control record and sequentially changing a recording power;

repeatedly performing the test record a plurality of times, in an outer peripheral test area which is on an outer peripheral side with respect to the program area of the optical disc, while controlling the velocity by making a linear velocity constant at a final value of a linear velocity in the constant rotational velocity control record and sequentially changing a recording power;

on the basis of a reproduced signal of the one test record in the inner peripheral test area, obtaining a recording power value at which a predetermined parameter relating to a reproduced signal quality has an appropriate value, so that the obtained recording power value is set as a recording power value at the initial value of the linear velocity in the constant rotational velocity control record;

on the basis of reproduced signals of the plural test records in the outer peripheral test area, obtaining a recording power value at which the predetermined parameter has an appropriate value for each of the test records, and obtaining an appropriate recording power value on the basis of recording power values which are obtained respectively for the test records, so that the obtained appropriate recording power value is set as a recording power value at the final value of the linear velocity in the constant rotational velocity control record and in the constant linear velocity control record;

in the area where the constant rotational velocity control record is performed when an actual record is performed on the optical disc, in accordance with the linear velocity at each position, interpolating the value which has been set as the recording power value at the initial value of the

linear velocity and the value which has been set as the recording power value at the final value of the linear velocity, and controlling the recording power value to the interpolated value; and

in the area where the constant linear control record is performed when the actual record is performed on the optical disc, controlling the recording power value to the value which has been set as the recording power value in the constant linear velocity control record.

15. (Original) The optical disc recording method of claim 14, further comprising:

eliminating an outlier value in the recording power values respectively obtained for the plural test records in the outer peripheral test area;

obtaining an average value of remaining recording power values; and

setting the average value as the recording power value at the final value of the linear velocity in the constant rotational velocity control record, and in the constant linear velocity control record.

16. (Original) The optical disc recording method of claim 14, further comprising:

obtaining a minimum value of the recording power values respectively obtained for the plural test records in the outer peripheral test area; and

setting the minimum value as the recording power value at the final value of the linear velocity in the constant rotational velocity control record, and in the constant linear velocity control record.

17. (Original) The optical disc recording method of claim 14, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a circumferential direction of the optical disc.

18. (Original) The optical disc recording method of claim 15, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a

circumferential direction of the optical disc.

19. (Original) The optical disc recording method of claim 16, wherein the plural test records in the outer peripheral test area are respectively performed in areas which are sequentially shifted in a circumferential direction of the optical disc.

20. (Original) The optical disc recording method of claim 14, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

21. (Original) The optical disc recording method of claim 15, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

22. (Original) The optical disc recording method of claim 16, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

23. (Original) The optical disc recording method of claim 17, wherein the outer peripheral test area is set in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

24. (Original) An optical disc recording device in which an actual record is performed on an optical disc while, in an inner peripheral side of the optical disc with respect to an adequate radial

position, a velocity is controlled by making a rotational velocity constant, and, in an outer peripheral side of the optical disc, the velocity is controlled by making a linear velocity constant at a final value of a linear velocity in the constant rotational velocity control, said device comprising:

- a disc servo circuit which rotates the optical disc;

- an optical pickup which irradiates the optical disc with a light beam to perform record and reproduction operations on the optical disc;

- an optical power controlling section which controls a power of the light beam emitted from the optical pickup;

- a signal quality detecting section which obtains a predetermined parameter relating to a reproduced signal quality on the basis of a reproduced signal detected by the optical pickup; and

- a system controlling section, wherein, in the system controlling section,

- prior to the actual record on the optical disc, in an inner peripheral test area which is on an inner peripheral side with respect to a program area of the optical disc, a test record is performed one time while a velocity is controlled by making a linear velocity constant at an initial value of the linear velocity in the constant rotational velocity control record and a recording power is sequentially changed, and, in an outer peripheral test area which is on an outer peripheral side with respect to the program area of the optical disc, the test record is repeatedly performed a plurality of times while the velocity is controlled by making a linear velocity constant at a final value of a linear velocity in the constant rotational velocity control record,

- on the basis of a reproduced signal of the one test record in the inner peripheral test area, a recording power value at which a predetermined parameter relating to a reproduced signal quality has an appropriate value is obtained, and the obtained value is set as a recording power value at the initial value of the linear velocity in the constant rotational velocity control record,

on the basis of reproduced signals of the plural test records in the outer peripheral test area, a recording power value at which the parameter has an appropriate value is obtained for each of the test records, and an appropriate recording power value is obtained on the basis of recording power values which are obtained respectively for the test records, and the obtained value is set as a recording power value at the final value of the linear velocity in the constant rotational velocity control record, and in the constant linear velocity control record, and

in an actual record on the optical disc, in the area where the constant rotational velocity control record is performed, the record is performed while, in accordance with the linear velocity at each position, interpolating the value which has been set as the recording power value at the initial value of the linear velocity, and the value which has been set as the recording power value at the final value of the linear velocity, and controlling the recording power value to the interpolated value, and, in the area where the constant linear control record is performed, the record is performed while controlling the recording power value to the value which has been set as the recording power value in the constant linear velocity control record.

25. (Original) The optical disc recording device of claim 24, wherein the system controlling section eliminates an outlier value of the recording power values respectively obtained for the plural test records in the outer peripheral test area, obtains an average value of remaining recording power values, and sets the average value as the recording power value at the final value of the linear velocity in the constant rotational velocity control record, and in the constant linear velocity control record.

26. (Original) The optical disc recording device of claim 24, wherein the system controlling section obtains a minimum value of the recording power values respectively obtained in the plural test records in the outer peripheral test area, and sets the minimum value as the recording power



value at the final value of the linear velocity in the constant rotational velocity control record, and in the constant linear velocity control record.

27. (Original) The optical disc recording device of claim 24, wherein the system controlling section respectively performs the plural test records in the outer peripheral test area in areas which are sequentially shifted in a circumferential direction of the optical disc.

28. (Original) The optical disc recording device of claim 25, wherein the system controlling section respectively performs the plural test records in the outer peripheral test area in areas which are sequentially shifted in a circumferential direction of the optical disc.

29. (Original) The optical disc recording device of claim 26, wherein the system controlling section respectively performs the plural test records in the outer peripheral test area in areas which are sequentially shifted in a circumferential direction of the optical disc.

30. (Original) The optical disc recording device of claim 24, wherein the system controlling section sets the outer peripheral test area in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

31. (Original) The optical disc recording device of claim 25, wherein the system controlling section sets the outer peripheral test area in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

32. (Original) The optical disc recording device of claim 26, wherein the system controlling section sets the outer peripheral test area in a remaining area which is obtained by removing an area

corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

33. (Original) The optical disc recording device of claim 27, wherein the system controlling section sets the outer peripheral test area in a remaining area which is obtained by removing an area corresponding to a predetermined lead-out area from a portion which is on an outer peripheral side of an information area with starting from a maximum allowable outer peripheral position of the program area.

34. (Canceled)

35. (Previously Presented) An optical disc recording method, comprising:

repeating a test recording a plurality of times, prior to an actual recording on a program area of an optical disc, on an outer test area in an outer peripheral portion of the optical disc, at a predetermined linear velocity, by stepwisely changing recording power in each one of the plurality of test recordings;

obtaining an optimum recording power for optimally recording at the predetermined linear velocity based on a plurality of reproduced signals of the plurality of test recordings on the outer test area in the outer peripheral portion of the optical disc; and

performing an actual recording on the program area of the optical disc by controlling the recording power according to the optimum recording power for optimally recording at the predetermined linear velocity.

36. (Previously Presented) An optical disc recording method of claim 35, further comprising:

performing an actual recording on the program area of the optical disc by controlling the recording power to an appropriate recording power at another linear velocity based on the

optimum recording power for optimally recording at the predetermined linear velocity.

37. (Previously Presented) An optical disc recording method of claim 35, the step of repeating a test recording further comprising:

shifting circumferential position of the test recording on the outer test area in the outer peripheral portion of the optical disk from a first position to at least one second position.

38. (Previously Presented) An optical disc recording method of claim 36, the step of repeating a test recording further comprising:

shifting circumferential position of the test recording on the outer test area in the outer peripheral portion of the optical disk from a first position to at least one second position.

39. (Previously Presented) An optical disc recording method of claim 37, the step of obtaining an optimum recording power comprising:

obtaining an appropriate recording power of each test recording from recording powers in a test recording as a recording power so that a predetermined parameter relating to a reproduced signal quality has an appropriate value;

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining an average value of remaining appropriate recording powers as the optimum recording power at the predetermined linear velocity.

40. (Previously Presented) An optical disc recording method of claim 37, the step of obtaining an optimum recording power comprising:

obtaining an appropriate recording power of each test recording from recording powers in a test recording as a recording power so that a predetermined parameter relating to a reproduced signal quality has an appropriate value;

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining a minimum value of remaining appropriate recording powers as the optimum recording power at the predetermined linear velocity.

41. (Previously Presented) An optical disc recording method of claim 38, the step of obtaining an optimum recording power comprising:

obtaining an appropriate recording power for each test recording from recording powers in a test recording, wherein the appropriate recording power is a recording power in which a predetermined parameter relating to a reproduced signal quality has an appropriate value;

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining an average value of remaining appropriate recording powers as the optimum recording power at the predetermined linear velocity.

42. (Previously Presented) An optical disc recording method of claim 38, the step of obtaining an optimum recording power comprising:

obtaining an appropriate recording power of each test recording from recording powers in a test recording as a recording power so that a predetermined parameter relating to a reproduced signal quality has an appropriate value;

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining a minimum value of remaining appropriate recording powers as the optimum recording power at the predetermined linear velocity.

43. (Previously Presented) An optical disc recording method of claim 35,

wherein the outer test area is set in a remaining area which is obtained by excluding an area corresponding to a predetermined lead-out area from the outer peripheral portion of the optical disc which portion starts from a maximum allowable outer peripheral position of the program area.

44. (Previously Presented) An optical disc recording method of claim 36,

wherein the outer test area is set in a remaining area which is obtained by excluding an area corresponding to a predetermined lead-out area from the outer peripheral portion of the optical disc which portion starts from a maximum allowable outer peripheral position of the program area.

45. (Previously Presented) An optical disc recording method in which an actual recording is performed on an optical disc while, in an inner peripheral portion of the optical disc with respect to a predetermined radial position, a velocity is controlled by making an angular velocity constant, and, in an outer peripheral portion of the optical disc with respect to the predetermined radial position, the velocity is controlled by making a linear velocity constant which linear velocity is equivalent to a final linear velocity in the control of the constant angular velocity, said method comprising:

performing a test recording one time by stepwisely changing recording power in the test recording, prior to the actual recording on the optical disc, on an inner test area in the inner peripheral portion of the optical disc, while controlling a velocity by making a linear velocity constant which linear velocity is equivalent to an initial linear velocity in the control of the constant angular velocity;

repeating a test recording a plurality of times by stepwisely changing recording power in each one of the test recordings, prior to an actual recording on the optical disc, on an outer test

area in the outer peripheral portion of the optical disc, while controlling the velocity by making a linear velocity constant which linear velocity is equivalent to an final linear velocity in the control of the constant angular velocity;

based on a reproduced signal of the test recording on the inner test area, obtaining an optimum recording power for optimally recording at the initial linear velocity from the recording powers in the test recording on the inner test area, wherein the optimum recording power is a recording power at which a predetermined parameter relating to a reproduced signal quality has an appropriate value;

based on reproduced signals of the test recordings on the outer test areas, obtaining appropriate recording powers of each test recording on the outer test areas from recording powers in the test recording on the outer test area, wherein an appropriate recording power is a recording power at which a predetermined parameter relating to a reproduced signal quality has an appropriate value, and based on the appropriate recording powers, obtaining an optimum recording power for optimally recording at the final linear velocity from the appropriate recording powers,

performing an actual recording in the inner peripheral portion of the optical disc with respect to the predetermined radial position by interpolating the optimum recording powers for optimally recording at the initial and final linear velocity according to a linear velocity of recording radial position and by controlling recording power to the interpolated recording power according to a linear velocity of recording radial position; and

performing an actual recording in the outer peripheral portion of the optical disc with respect to the predetermined radial position by controlling recording power to the optimum recording power for optimally recording at the final linear velocity.

46. (Previously Presented) An optical disc recording method of claim 45, the step of repeating a test recording further comprising:

shifting circumferential position of the test recording on the outer test area in the outer peripheral portion of the optical disc from a first position to at least one second position.

47. (Previously Presented) An optical disc recording method of claim 46, the step of obtaining an optimum recording power for optimally recording at the final linear velocity further comprising:

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining an average value of remaining appropriate recording powers as the optimum recording power for optimally recording at the final linear velocity.

48. (Previously Presented) An optical disc recording method of claim 46, the step of obtaining an optimum recording power for optimally recording at the final linear velocity further comprising:

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining a minimum value of remaining appropriate recording powers as the optimum recording power for optimally recording at the final linear velocity.

49. (Previously Presented) An optical disc recording method of claim 45,

wherein the outer test area is set in a remaining area which is obtained by excluding an area corresponding to a predetermined lead-out area from the outer peripheral portion of the optical disc which portion starts from a maximum allowable radial position of the program area.

50. (Previously Presented) An optical disc recording device in which an actual recording is performed on an optical disc while, in an inner peripheral portion of the optical disc with respect to an predetermined radial position, a velocity is controlled by making an angular velocity constant, and, in an outer peripheral portion of the optical disc with respect to the predetermined radial position, the velocity is controlled by making a linear velocity constant which linear velocity is equivalent to a final linear velocity in the control of the constant angular velocity, said device comprising:

- a disc servo circuit that rotates the optical disc;

- an optical pickup that irradiates the optical disc with a light beam to perform recording and reproduction operations on the optical disc;

- a light power controlling section that controls a power of the light beam emitted from the optical pickup;

- a signal quality detecting section that obtains a predetermined parameter relating to a reproduced signal quality based on a reproduced signal detected by the optical pickup;

- a system controlling section that controls, prior to the actual recording on the optical disc, the optical pickup to perform a test recording one time on an inner test area in the inner peripheral portion of the optical disc and to repeat a test recording a plurality of times on an outer test area in a outer peripheral portion of the optical disc, the light power control section to change recording power stepwisely in the test recording, the disc servo to control a velocity at the inner test area by making a linear velocity constant which linear velocity is equivalent to an initial linear velocity in the control of the constant angular velocity and to control a velocity at an outer test area by making a linear velocity constant which linear velocity is equivalent to the final linear velocity in the control of the constant angular velocity, the signal quality detection section,



based on a reproduced signal of the test recording on the inner test area, to detect an optimum recording power for optimally recording at the initial linear velocity from recording powers in the test recording on the inner test area, wherein the optimum recording power is a recording power at which a predetermined parameter relating to a reproduced signal quality has an appropriate value, and based on reproduced signals of the test recordings on the outer test area, to detect appropriate recording powers of each test recording on the outer test area from recording powers in the test recording on the outer test area, wherein an appropriate recording powers is a recording power at which a predetermined parameter relating to a reproduced signal quality has an appropriate value, and based on the appropriate recording powers, to obtain an optimum recording power for optimally recording at the final linear velocity from the appropriate recording powers, on the actual recording on the optical disc, the optical pickup to perform the actual recording on the program area of the optical disc, the light power control section to control the recording power, in the inner peripheral portion of the optical disc with respect to the predetermined radial position by interpolating the optimum recording powers for optimally recording at the initial and final linear velocities according to a linear velocity of recording radial position, to the interpolated recording power according to a linear velocity of recording radial position, and in the outer peripheral portion of the optical disc with respect to the predetermined radial position under the constant linear velocity control, to the optimum recording power for optimally recording at the final linear velocity the disc servo to control a velocity by making an angular velocity constant in the inner peripheral portion of the optical disc with respect to the predetermined radial position and the velocity by making linear velocity constant in the outer peripheral portion of the optical disc with respect to the predetermined radial position.

51. (Previously Presented) An optical disc recording device of claim 50, wherein the system

controlling section controls the optical pickup to repeat a test recording a plurality of times on the outer peripheral portion of the optical disk wherein the test recordings are performed respectively with shifting circumferential position from a first position to at least one second position.

52. (Previously Presented) An optical disc recording device of claim 51, wherein the system controlling section eliminates an outlying value of the appropriate recording powers obtained from the test recordings and obtains an average value of remaining appropriate recording powers as the optimum recording power for optimally recording at the final linear velocity.

53. (Previously Presented) An optical disc recording device of claim 51, wherein the system controlling section eliminates an outlying value of the appropriate recording powers obtained from the test recordings and obtains a minimum value of remaining appropriate recording powers as the optimum recording power for optimally recording at the final linear velocity.

54. (Previously Presented) An optical disc recording device of claim 50, wherein the system controlling section sets the outer test area in a remaining area which is obtained by excluding an area corresponding to the predetermined lead-out area from the outer peripheral portion of the optical disc which portion starts from a maximum allowable radial position of the program area.

55. (Canceled)

56. (Canceled)

57. (Previously Presented) An optical disc recording method in which an actual recording is performed in an area of an optical disc from an inner peripheral portion of the optical disc to an outer peripheral portion of the optical disc, under an constant angular velocity control, said method comprising:

performing a test recording, by stepwisely changing recording power in the test recording, prior to the actual recording on the optical disc, on an inner test area in the inner peripheral

portion of the optical disc, while a velocity is controlled by making a linear velocity constant which linear velocity is equivalent to an initial linear velocity in the control of the constant angular velocity;

repeating a test recording at least same number of test recordings performed on the inner test area, by stepwisely changing recording power in each one of the test recordings, prior to an actual recording on the optical disc, on an outer test area in the outer peripheral portion of the optical disc, while a velocity is controlled by making a linear velocity constant which linear velocity is equivalent to an final linear velocity in the control of the constant angular velocity;

based on a reproduced signal of the test recording on the inner test area, obtaining an optimum recording power for optimally recording at the initial linear velocity from recording powers in the test recording on the inner test area, wherein the optimum recording power is a recording power at which a predetermined parameter relating to a reproduced signal quality has an appropriate value;

based on reproduced signals of the test recordings on the outer test area, obtaining appropriate recording powers of each test recording on the outer test area from recording powers in the test recording on the outer test area, wherein an appropriate recording power is a recording power at which a predetermined parameter relating to a reproduced signal quality has an appropriate value, and based on the appropriate recording powers, obtaining a optimum recording power for optimally recording at the final linear velocity from the appropriate recording powers;

performing an actual recording from the inner peripheral portion of the optical disc to the outer peripheral portion of the optical disc in the area of the optical disc under the constant angular control by controlling a recording power to a recording power interpolated through the optimum recording powers for optimally recording at the initial and final linear velocity

according to a linear velocity of recording radial position.

58. (Previously Presented) An optical disc recording method of claim 57, wherein the test recording on the outer test area is repeated a plurality of times and circumferential positions of the test recordings are shifted from a first position to at least one second position.

59. (Previously Presented) An optical disc recording method of claim 58, the step of obtaining the optimum recording power for optimally recording at the final linear velocity further comprising:

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining an average value of remaining appropriate recording powers as the optimum recording power for optimally recording at the final linear velocity.

60. (Previously Presented) An optical disc recording method of claim 58, the step of obtaining the optimum recording power for optimally recording at the final linear velocity further comprising:

eliminating an outlying value of the appropriate recording powers obtained from the test recordings; and

obtaining a minimum value of remaining appropriate recording powers as the optimum recording power for optimally recording at the final linear velocity.

61. (Previously Presented) An optical disc recording method of claim 57, wherein the outer test area is set in a remaining area which is obtained by excluding an area corresponding to a predetermined lead-out area from the outer peripheral portion of the optical disc which portion starts from a maximum allowable radial position of the program area.